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THE TRANSPORTATION OF DANGEROUS GOODS

Jacques Rousseau

Law and Government Division
Research Branch
Ottawa

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BACKGROUND PAPER FOR PARLIAMENTARIANS

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THE TRANSPORTATION OF DANGEROUS GOODS

INTRODUCTION

Canada, as everyone knows, is a vast country. It is normal therefore that the transportation of goods across this great landscape has been and continues to be a key factor in the country's economic development. A wide range of goods are transported, some of which qualify as "dangerous". These include toxic chemicals and highly flammable or explosive products.

In the past, accidents involving such dangerous products have occurred. Unfortunately, it is more than likely that accidents like these will happen again in the future. An example of one bad accident comes to mind, namely the derailment of a train transporting flammable products and toxic gas in Mississauga, Ontario in 1979. This incident spawned some government reaction. The Mississauga derailment led, after several failed attempts, to the adoption by Parliament in 1980 of the Transportation of Dangerous Goods Act (TDGA).⁽¹⁾ This legislation and the voluminous accompanying Transportation of Dangerous Goods Regulations (TDGR)⁽²⁾ adopted in 1985 now constitute the cornerstone of a series of regulations to be followed when transporting dangerous goods by air, water, rail or road. The scope of application of this series of regulations is very broad. Section 3(1) of the TDGA stipulates that the legislation "applies to all handling, offering for transport and transporting of dangerous goods, by any means of transport, whether or not for hire or reward and whether or not the goods originate from or are destined for any place or places in Canada".

(1) S.C. 1980-81-82-83, c. 36; amended by: S.C. 1980-81-82-83, c. 165, section 43; S.C. 1983-84, c. 40, section 73 and number 24.

(2) SOR/85-77, Canada Gazette, 1985, Part II, p. 393; amended by: SOR/85-314, Canada Gazette, 1985, Part II, p. 1750; SOR/85-585, Canada Gazette, 1985, Part II, p. 2938; SOR/85-609, Canada Gazette, 1985, Part II, p. 2982.

It would be timely, at this point, to recall the constitutional context in which the TDGA was adopted. The legislation is a so-called "umbrella" statute that potentially applies to all modes of transportation, regardless of their intraprovincial or interprovincial nature. The legislation also applies to the transporting of dangerous goods by a commercial firm or by a private individual such as a consumer.

After outlining the scope of the application of the TDGA and the TDGR, this paper will briefly describe the regulations with which individuals engaged in this type of activity must now comply.

THE SCOPE OF THE APPLICATION OF THE TDGA AND THE TDGR

A. The Constitutional Context

From a constitutional standpoint, the TDGA is not a statute governing transportation. Except in the case of air transportation, jurisdiction over transportation is shared; the provinces have responsibility for transportation within their boundaries while interprovincial transportation is within the purview of the federal government.⁽¹⁾ The field of aeronautics comes under federal jurisdiction.⁽²⁾ As the Minister of Transport remarked when he appeared before the Standing Senate Committee on Transport and Communications,⁽³⁾ the TDGA is based rather on the federal Parliament's power to enact legislation for "peace, order and good government". However, as far as the implementation of the TDGA is concerned, it is anticipated that the federal Minister of Transport will be able to negotiate with the provinces agreements respecting intraprovincial modes of transportation.⁽⁴⁾ Where an agreement is entered into with a

(1) P.W. Hogg, Constitutional Law of Canada, 2nd ed., Toronto, Carswell, 1985, p. 483 to 498.

(2) Ibid., p. 495 to 498.

(3) Canada, Senate, Standing Senate Committee on Transport and Communications, Proceedings, March 26, 1985, p. 1:20.

(4) TDGA, section 25(1)(a).

province, section 32(2) of the TDGA authorizes the federal Cabinet to proclaim the coming into force of the TDGA and the TDGR in that province. In the case of an impasse, section 32(4) provides the government with the option of acting unilaterally:

Where the Minister is satisfied that despite reasonable efforts over a period of twelve months after the commencement of negotiations or such longer period as the Minister considers reasonable, an agreement pursuant to paragraph 25(1)(a) has not been entered into with a province, the Governor in Council may, on the recommendation of the Minister, by proclamation make any provision authorized under subsection (2) as if an appropriate agreement had been entered into.

The fact is that the federal government proclaimed the coming into force of the regulatory requirements provided for in the TDGR on July 1, 1985, but only as these apply to modes of transport which traditionally come under federal jurisdiction. Practically speaking, intraprovincial transport by road within Canada is the only important mode of transport not covered by these regulations.

This is not to say that the transportation by road of dangerous goods between two points within a given province is not regulated. Indeed, this mode of transport is subject to the same regulatory requirements as interprovincial road transportation, in view of the fact that the provinces have adopted legislation in this area and have enforced the TDGR within their boundaries. As of February 1, 1986, all the provinces and the Northwest Territories had adopted such legislation, while the Yukon is expected to take similar action on April 1, 1986.

The provinces have not invoked their jurisdiction over intraprovincial transport as their constitutional grounds for getting involved in this sector of activity. They cite rather their jurisdiction over the use of provincial roads,⁽¹⁾ recognized as being their domain in the judgment handed down in the case of the Attorney General of Ontario v. Winner.⁽²⁾

(1) Canada, Senate, Standing Senate Committee on Transport and Communications, Proceedings, June 25, 1985, p. 9:19 (testimony given by Mr. T.D. Ellison, Director General, Transportation of Dangerous Goods, federal Department of Transport).

(2) (1954) A.C. 541.

In summing up this brief overview of the constitutional aspects of this issue, it bears mentioning that Alberta and Quebec contend that both the federal and the provincial legislation governing the transportation of dangerous goods come under the heading of transportation law and, as such, fall within the jurisdiction of one of the two orders of government, depending on whether the activity in question is limited to the movement of goods within a province. Given their stand on this issue, these two provinces believe that sections 25(1)(a) and 32(2) of the TDGA are unconstitutional and that the federal government can therefore not implement the TDGA as it applies to intraprovincial modes of transport, as these sections now authorize it to do. This being so, it should be remembered for now that owing to the combined effect of the federal, provincial and territorial legislation, this entire sector of activity is subject to the same regulatory requirements.

B. Activities within the Purview of the TGDA and TDGR

As we have already seen, section 3(1) of the TDGA stipulates that this legislation and the TDGR apply to all handling, offering for transport and transporting of dangerous goods, whether or not for hire or reward. The legislation does, however, allow a number of exemptions.

Exempted activities include those coming under the sole direction or control of the Department of National Defence,⁽¹⁾ and the handling, offering for transport and transporting, firstly, of oil or gas by pipeline that is governed by the National Energy Board Act, by the Oil and Gas Production and Conservation Act or by the law of a province⁽²⁾ and secondly, of dangerous goods in bulk within the meaning of the Canada Shipping Act.⁽³⁾ Exempted activities also include the handling, offering for transport and transporting of goods for which the Minister or

(1) TDGA, section 3(3)(b).

(2) TDGA, section 3(4).

(3) Ibid., section 3(5).

a person designated by him has issued a permit in accordance with the regulations.⁽¹⁾ Finally, the Governor in Council may proclaim, by regulation, exemptions to both the TDGA and the TDGR. Section 21 (e) and (f) of the TDGA confer this power.

21. The Governor in Council may make regulations generally for carrying out the purposes and provisions of this Act and, in particular, but without restricting the generality of the foregoing, may make regulations:
[...]

(e) exempting from the application of this Act and the regulations or any provision thereof the handling, offering for transport or transporting of dangerous goods in such quantities or concentrations, in such circumstances, at such places, premises or facilities, for such purposes or in such containers, packaging or means of transport as are specified in the regulations;

(f) prescribing the manner of identifying any quantities of concentrations of dangerous goods exempted pursuant to paragraph (e);
[...]

Persons engaged in activities not governed by the TDGA or by the TDGR may, however, be ordered by the Minister, in accordance with section 28 of the TDGA, to cease such activities or to conduct them in accordance with the manner directed:

28. Where the Minister or a person designated by the Minister considers it to be necessary for the protection of public safety, property or the environment in any case not provided for by this Act and the regulations, he may, subject to any regulations made pursuant to paragraph 21(r), direct any person engaged in handling, offering for transport or transporting dangerous goods to cease any such activity or to carry it on in the manner directed.

The Governor in Council made extensive use of the power to make regulations to provide for exemptions since these account for 14 pages of the TDGR. It should, however, be noted that these exemptions are often applicable only if certain conditions respecting the safety of operations are met. For example, section 2.29.1 of the TDGR stipulates the following:

(1) Ibid., section 3(3)(c).

2.29.1 Subject to part IX, these Regulations do not apply to the handling, offering for transport or transporting of samples of explosives solely by a road vehicle if

- a) the quantity of samples does not exceed
 - (i) 25 kg net explosives quantity, or
 - (ii) where the explosives are contained in an article, not more than 50 articles;
- b) the samples are constantly in the custody and control of the owner of the explosives or his agent;
- c) no other dangerous goods are carried as cargo on or in the vehicle; and
- d) the road vehicle is not a public passenger road vehicle.

Despite the large number of exemptions, it should not be forgotten that the TDGA applies to all persons who handle, offer for transport or transport dangerous goods except in the case of an exception specifically provided for. The Schedule of the TDGA gives a general idea of the dangerous goods covered by the legislation.⁽¹⁾ The TDGR apply to dangerous goods, from the moment they leave the manufacturing or packing facility for shipping purposes until the time they arrive at the unloading point for ultimate use or disposal. For persons engaged in industrial or commercial activities connected with such goods, the situation may be summarized as follows: the TDGA and the TDGR impose legal obligations on the carriers, manufacturers, shippers, distributors and middlemen.

It is not necessary for a person to be engaged in an industrial or commercial activity involving dangerous goods in order to be subject to the TDGR. Here again, the exemptions reveal the broad application of the regulations. Section 2.20(1) of the TDGR could very well be referred to as the "Winnabago" exemption. It reads in part as follows:

(1) A copy of the Schedule is attached to this document.

2.20(1) ... these Regulations do not apply to the handling, offering for transport or transporting by a road vehicle that is a recreational type vehicle, of dangerous goods that are necessary for the operation of the recreational vehicle or for recreational purposes.

Equally significant for the scope of the application of the TDGR is their section 2.21(1) (as amended), which sets out the conditions in which a consumer who purchases in a retail outlet an item covered by the Regulations, and transports it to his home, is not bound to observe all the legal requirements. Finally, it is worth mentioning that there is an exemption for prosthetic devices "attached to or implanted in an individual" who is travelling by plane, ship, train or road vehicle.⁽¹⁾

This brings us to the contents of the TDGA and the TDGR.

PUBLIC SAFETY WITH RESPECT TO THE TRANSPORTATION OF DANGEROUS GOODS: REGULATORY REQUIREMENTS

A. The TDGA

Although the TDGA does not itself contain any rules to be followed in transporting dangerous goods, it does set forth certain important elements with respect to the implementation of such rules, and the prevention of or redress for damages caused by an accident.

With respect to infractions, the TDGA makes it illegal to handle or offer to transport or transport any dangerous goods unless safety provisions are strictly observed and the containers meet the prescribed safety standards and are marked with a regulation safety mark.⁽²⁾ It is also against the law to affix a regulation safety mark to a container unless the container meets the required safety standards.⁽³⁾ These provisions apply to all means of transport for which safety standards have been specifically established.

(1) TGDR, sec. 2.3(e).

(2) TDGA, sec. 4

(3) Ibid., sec. 5.

Infractions can result in very severe penalties. A maximum fine of \$50,000 for a first offence and of \$100,000 for any subsequent offence may be imposed.⁽¹⁾ Anyone found guilty of breaking the law is liable, upon summary conviction, to a maximum prison term of two years.⁽²⁾ Proceedings by way of summary conviction are barred by the TDGA after two years⁽³⁾ have elapsed from the date of the infraction. No one may be found guilty under this Act if he establishes that he took all reasonable measures to comply with it and with the regulations.⁽⁴⁾

The TDGA contains provisions governing responsibility in case of accidents. It obliges the persons responsible for dangerous goods to take the emergency measures required to reduce or mitigate property damage and injuries caused by leaks or emissions of the substances involved.⁽⁵⁾ A duly authorized inspector may take analogous measures when circumstances so dictate,⁽⁶⁾ and he is also empowered to request that emergency measures be taken by any person whom he considers qualified.⁽⁷⁾ This person incurs no personal liability, either civil or criminal, for actions performed in these circumstances.⁽⁸⁾

The TDGA provides that the Crown may take the necessary steps to recover the costs of emergency measures from these people whose fault or negligence caused or contributed to causing the accident,⁽⁹⁾ and in such cases the defendant is presumed liable.⁽¹⁰⁾ That is, if someone owns or is responsible for dangerous goods, he is presumed guilty if an accident

(1) Ibid., sec. 6(1)(a).

(2) Ibid., sec. 6(1)(b): infractions under other sections of the TDGA may result in a maximum fine of \$10,000 or a year's imprisonment, under the provisions of sec. 6(2).

(3) Ibid., sec. 6(3).

(4) Ibid., sec. 8.

(5) Ibid., sec. 17(2).

(6) Ibid., sec. 17(3).

(7) Ibid.

(8) Ibid., sec. 17(5).

(9) Ibid., sec. 18(1).

(10) Ibid., sec. 18(2).

occurs unless he is able to prove that he complied with the Act and the Regulations. If two or more such persons are involved in an accident, they are held jointly liable for damages.⁽¹⁾ Legal proceedings under this Act must be instituted within two years from the date of the incident.⁽²⁾

The rules that must be followed in handling, offering for transport and transporting dangerous goods, are set down in the TDGR, passed by the Governor in Council under the powers conferred by section 21 of the TDGA.

B. The TDGR

When the Minister of Transport appeared before the Standing Senate Committee on Transport and Communications, he explained that the ultimate aim of the TDGR is to create a set of uniform regulatory requirements applying to all means of transport.⁽³⁾ Before the TDGR existed, various regulations governed the transportation of dangerous goods, such as the Dangerous Goods Shipping Regulations,⁽⁴⁾ sections 38 to 66 of the Explosives Regulations⁽⁵⁾ and the Transport Packaging of Radioactive Materials Regulations.⁽⁶⁾ These regulations are still in effect, and the TDGR refer to them from time to time, for example in section 5.4(1) dealing with Class 7 dangerous goods (radioactive materials):

(1) Ibid., sec. 18(1).

(2) Ibid., sec. 18(7).

(3) Canada, Senate, the Standing Senate Committee on Transport and Communications, Proceedings, March 26, 1985, p. 1:13.

(4) SOR/81-951, Canada Gazette, 1981, Part II, p. 3525.

(5) CRC 1978, c. 599; amended by: SOR/80-488, Canada Gazette, 1980, Part II, p. 2353; SOR/82-779, Canada Gazette, 1982, Part II, p. 2837; SOR/82-824, Canada Gazette, 1982, Part II, p. 3046; SOR/82-946, Canada Gazette, 1982, Part II, p. 3614; SOR/83-851, Canada Gazette, 1983, Part II, p. 4150; SOR/84-320, Canada Gazette, 1984, Part II, p. 1656.

(6) SOR/83-740, Canada Gazette, 1983, Part II, p. 3553 and the following corrigenda: Canada Gazette, 1983, Part II, p. 3984; Canada Gazette, 1984, Part II, p. 1095.

5.4(1) No person shall handle, offer for transport or transport dangerous goods that are included under Class 7, unless the safety marks for the dangerous goods are in compliance with the requirements for safety marks set out in the Transport Packaging of Radioactive Materials Regulations

Although these regulations continue to apply, it should be noted that section 31 of the TDGA stipulates that where there are discrepancies between the TDGR and any other regulation, the former shall override the latter. As the TDGR are developed, the "old" regulations will gradually be superseded.

The TDGR currently has thirteen parts, and a fourteenth, on ticketing certain offences, is expected to be added at some future date. The parts now in force and the schedules make up a document of 521 pages. Part I contains definitions. Part II deals with the application of the TDGR; it defines the exemptions. Part III deals with the classification of dangerous goods; it should be noted that the classification system that has been adopted conforms to that formulated by the United Nations, with very few exceptions. Part IV spells out the documentation that must accompany any shipment of dangerous goods. Part V defines the safety marks that must be affixed to the goods and to their means of transport. Parts VI, VII and VIII set standards and safety rules: for example, section 7.4 forbids anyone to "handle or offer for transport two or more dangerous goods that are contained in the same packaging, if a mixture of the dangerous goods would result in an evolution of heat or gas, or would produce a corrosive, that could endanger the packaging". These three parts are currently at the "skeletal" stage.⁽¹⁾ Part IX deals with the training that must be given to employees involved in activities relating to dangerous goods and with the reports that must be filed if an accident occurs. Part X deals with the procedure to be followed when the Department or a person designated by the Department issues an order under section 28 of the TDGA. Part XI deals with permits of exemption and equivalent levels of safety. Part XII requires

(1) Canada, Senate, Standing Senate Committee on Transport and Communications, Proceedings, April 2, 1985, p. 2:14 (testimony by Mr. M.J. Monteith, Director, Regulatory Requirements, Transportation of Dangerous Goods, Transport Canada).

persons who are not residents of Canada to designate a Canadian agent if they wish to handle, offer for transport or transport, dangerous goods [in Canada]. Finally, Part XIII deals with the powers of inspectors. Schedules II and III contain other regulatory requirements.

The contribution of the TDGR to improved public safety has received a number of favourable comments from witnesses appearing before the Standing Senate Committee on Transport and Communications. In its recently tabled report on this subject, the Committee quotes the following testimony:

I would point out again that the transport of dangerous goods regulations will improve safety in the sense of upgrading packaging standards and containment standards. It will also create an identification system, but that identification system will help minimize danger by requiring perhaps separation of goods or that you cannot carry certain very dangerous substances in the same vehicle as other dangerous substances. The major benefit of this is to identify a situation that arises after a train has gone off the tracks, or after a truck has had an accident. It will not stop a railway track from splitting at Pettawawa. It will not stop a truck from skidding on ice or a motorist cutting off a truck or a truck driver who has not had enough rest. It will not stop those kinds of accidents at all. I am afraid there is a bit of a public perception that if these regulations were here, that all manner of hazards would disappear. They certainly will not. It should allow serious hazards to be handled in a safer manner.⁽¹⁾

On completion of its consideration of the TDGR, however, the Standing Senate Committee on Transport and Communications did comment that the document was so complex that many of the people to whom it applies would be unable to determine the regulatory requirements by reading the TDGR themselves. Noting that information booklets had been produced for the industry, the Committee recommended that information programs designed for the general public be set up. Along other lines, the Committee also

(1) Canada, Senate, Standing Senate Committee on Transport and Communications, Sixth Report, (Transportation of Dangerous Goods) February 1986, p. 11 (extract from the testimony of Mr. A.T. MacLaren, Executive Director of the Canadian Trucking Association).

recommended that a proof of solvency, in the form of liability insurance or any other form the Department found satisfactory, be required from people involved in the transportation of dangerous goods, as the Minister is empowered by section 19(1) of the TDGA to require. The Committee set the amount of the insurance at \$1,000,000. It does not believe that this amount is sufficient, given the possible gravity of the financial consequences of an accident involving dangerous goods, but the briefs submitted by representatives of the Insurance Bureau of Canada were unequivocal: the insurance industry is categorically not in a position to supply coverage above \$1,000,000. Nor is the industry prepared to supply insurance policies covering pollution damage. The Committee thus stressed that the requirement of supplying proof of solvency to the amount of \$1,000,000 should be considered a temporary solution, and that satisfactory solutions to these problems had still to be found.

CONCLUSION

The passage of the TDGA and the TDGR constitutes an attempt to rationalize the regulation of the transportation of dangerous goods across Canada. This rationalization, as we have seen, is not yet complete. Obviously it will have to be completed: if not, a certain fragmentation will persist in the rules governing this area of activity.

Certain problems had not been settled at the time the TDGR came into force, and still have not been settled, as the Standing Senate Committee on Transport and Communications pointed out in its Report. This document has touched on some of those problems.

It might be wise for Parliament, through one of its committees, to examine developments in this area after a certain time has elapsed. Section 30 of the TDGA requires that, "as soon as possible" after the end of each year, the Minister table to Parliament a report on the administration and enforcement of the Act during that year. Perhaps the tabling of the Minister's report could be followed by an overall examination of developments in the rationalization of the regulations and in solutions to the problems left pending when the TDGR were passed.

APPENDIX

Classification of Dangerous Goods⁽¹⁾

Class 1—Explosives, including explosives within the meaning of the *Explosives Act*

Class 2—Gases: compressed, deeply refrigerated, liquefied or dissolved under pressure

Class 3—Flammable and combustible liquids

Class 4—Flammable solids; substances liable to spontaneous combustion; substances that on contact with water emit flammable gases

Class 5—Oxidizing substances; organic peroxides

Class 6—Poisonous (toxic) and infectious substances

Class 7—Radioactive materials and prescribed substances within the meaning of the *Atomic Energy Control Act*

Class 8—Corrosives

Class 9—Miscellaneous products, substances or organisms considered by the Governor in Council to be dangerous to life, health, property or the environment when handled, offered for transport or transported and prescribed to be included in this class

(1) Transportation of Dangerous Goods Act, S.C. 1980-81-82-83, c. 36, Schedule.



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